

DTC	P0135	Heated Oxygen Sensor Heater Circuit Malfunction (Bank1 Sensor1)
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DTC	P0141	Heated Oxygen Sensor Heated Circuit Malfunction (Bank1 Sensor2)
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CIRCUIT DESCRIPTION

Refer to DTC P0125 (Insufficient Coolant Temp. for Closed Loop Fuel Control) on page [DI-44](#).

DTC No.	DTC Detecting Condition	Trouble Area
P0135	When the heater operates, heater current exceeds 2 A (2 trip detection logic)	<ul style="list-style-type: none"> • Open or short in heater circuit of heated oxygen sensor • Heated oxygen sensor heater • ECM
P0141	Heater current of 0.2 A or less when the heater operates (2 trip detection logic)	

HINT:

- Bank 1 refers to the bank that includes cylinder No.1.
- Sensor 1 refers to the sensor closer to the engine body.
- Sensor 2 refers to the sensor farther away from the engine body.

WIRING DIAGRAM

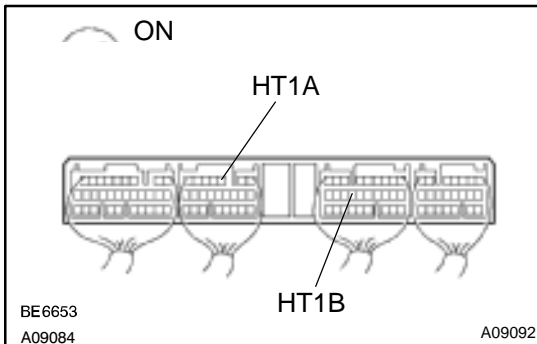
Refer to DTC P0125 on page [DI-44](#) for the WIRING DIAGRAM.

INSPECTION PROCEDURE

HINT:

Read freeze frame data using TOYOTA hand-held tester or OBD II scan tool. Because freeze frame records the engine conditions when the malfunction is detected, when troubleshooting it is useful for determining whether the vehicle was running or stopped, the engine warmed up or not, the air-fuel ratio lean or rich, etc. at the time of the malfunction.

1 Check voltage between terminals HT1, HT2 of ECM connectors and body ground.



PREPARATION:

- (a) Remove the ECM cover.
- (b) Remove the 3 bolts from ECM.
- (c) Turn the ignition switch ON.

CHECK:

Measure voltage between terminals HT1A, HT1B of ECM connectors and body ground.

HINT:

- Connect terminal HT1A to bank 1 sensor 1.
- Connect terminal HT1B to bank 1 sensor 2.

OK:

Voltage: 9 – 14 V

OK

Check and replace ECM (See page [IN-30](#)).

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2 Check resistance of heated oxygen sensor heater (See page [SF-70](#)).

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Replace heated oxygen sensor.

OK

Check and repair harness or connector between EFI main relay (Marking: EFI), heated oxygen sensor and ECM (See page [IN-30](#)).